



**Air Quality**  
**PERMIT TO CONSTRUCT**  
**State of Idaho**  
**Department of Environmental Quality**

**PERMIT No.:** P-2007.0052

**FACILITY ID No.:** 047-00008

**AQCR:** 63

**CLASS:** SM

**SIC:** 2022

**ZONE:** 11

**UTM COORDINATE (km):** 693.3, 4757.6

**1. PERMITTEE**

Glanbia Foods, Inc., Gooding Facility

**2. PROJECT**

Permit to Construct (PTC) Modification – Lactose Production Increase

**3. MAILING ADDRESS**

1728 South 2300 East

**CITY**

Gooding

**STATE**

ID

**ZIP**

83330

**4. FACILITY CONTACT**

Todd Hughes

**TITLE**

Environmental Manager

**TELEPHONE**

(208) 934-9835

**5. RESPONSIBLE OFFICIAL**

Barney Krueger

**TITLE**

Vice President Technical Services

**TELEPHONE**

(208) 733-7555

**6. EXACT PLANT LOCATION**

1728 South 2300 East, Gooding Idaho

**COUNTY**

Gooding

**7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS**

Cheese and Whey Processing

**8. PERMIT AUTHORITY**

This permit is issued according to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200 through 228, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes in design, equipment or operations may be considered a modification. Modifications are subject to DEQ review in accordance with IDAPA 58.01.01.200 through 228 of the Rules for the Control of Air Pollution in Idaho.

\_\_\_\_\_  
**SHAWNEE CHEN, P.E., PERMIT WRITER**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**DATE MODIFIED/REVISED:**

PROPOSED FOR  
PUBLIC COMMENT

**DATE ISSUED:**

July 22, 1992

\_\_\_\_\_  
**MIKE SIMON, STATIONARY SOURCE PROGRAM**  
**MANAGER**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

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## Acronyms, Units, and Chemical Nomenclature

AQCR	Air Quality Control Region
CFR	Code of Federal Regulations
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
gal/mo	gallons per month
gal/yr	gallons per any consecutive 12-month period
gr/dscf	grains (1 lb = 7,000 grains) per dry standard cubic foot
H <sub>2</sub> S	hydrogen sulfide
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/day	pounds per day
lb/hr	pounds per hour
lb/million Btu	pounds per million British thermal units
MMBtu/hr	million British thermal units per hour
NAAQS	National Ambient Air Quality Standards
NSPS	New Source Performance Standards
O&M	Operations & Maintenance
PM	particulate matter
PM <sub>10</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PTC	permit to construct
SIC	Standard Industrial Classification
SM	synthetic minor
SO <sub>2</sub>	sulfur dioxide
T/yr	tons per year
UTM	Universal Transverse Mercator
wt %	weight percent

**AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2007.0052**

**Permittee:** Glanbia Foods, Inc.

**Location:** Gooding, Idaho

**Facility ID No.** 047-00008

**1. PERMIT TO CONSTRUCT SCOPE**

***Purpose***

1.1 Glanbia proposed to increase lactose production at their Gooding Facility. Glanbia requested a Permit to Construct (PTC) for the lactose production increase that is included in Section 4 of this permit.

**[proposed]**

1.2 This PTC replaces PTC No. P-060454, issued March 23, 2007, the terms and conditions of which shall no longer apply.

**[proposed]**

***Regulated Sources***

Table 1.1 lists all sources of regulated emissions in this PTC.

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**TABLE 1.1 REGULATED EMISSIONS SOURCES**

Permit Section	Source Description	Emissions Control(s)
2	<u>Anaerobic digester</u>	<u>Biogas flare</u> (Flr 1) Manufacturer: Varec Biogas Model: No. 244 W Rated Heat Input Capacity: 11.75 MMBtu/hr Date of Installation: 2005
2	<u>Auxiliary Boiler</u> (Blr 5) Manufacturer: Cleaver Brooks Model No.: CB700-400-30H Rated Heat Input Capacity: 16.73 MMBtu/hr Fuels: Biogas and/or natural gas Date of Installation: 2005	None (considered an emission control device when combusting biogas)
3	<u>Boiler 2</u> (Blr 2) Rated Heat Input Capacity: 25.1MMBtu/hr Manufacturer: Cleaver Brooks Model No.: CB600-600 Serial No.: L-90943 Fuels: Low sulfur distillate fuel oil or natural gas Date of Installation: July 1992	Annual distillate fuel oil throughput limit and distillate fuel oil sulfur content limit
	<u>Boiler 3</u> (Blr 3) Rated Heat Input Capacity: 25.1MMBtu/hr Manufacturer: Cleaver Brooks Model No.: CB600-600 Serial No.: L-79896 Fuels: Low sulfur distillate fuel oil or natural gas Date of Installation: December 1996	Annual distillate fuel oil throughput limit and distillate fuel oil sulfur content limit
	<u>Boiler 4</u> (Blr 4) Rated Heat Input Capacity: 25.1MMBtu/hr Manufacturer: Cleaver Brooks Model No.: CB600-600 Serial No.: L-79895 Fuels: Natural gas exclusively Date of Installation: December 1999	None
4	<u>Lactose Production Line - Lactose Dryer</u> Manufacturer: NIRO Model: Unknown Design capacity: 6,626 lb/hr originally, increased to 7,621 T/hr Rated heat input rate: steam heated. Boiler room provides the steam Product recovery equipment: Cyclone Manufacturer: NIRO Model: CHE3000 Date of Installation: 1996	Scrubber (following the cyclone in series to control whey powers) Manufacturer: NIRO/YORK Model: NIRO 4.18 Control Efficiency: 52% Water Flow: 3.74 gallon per minute Pressure Drop: 1.0 inch of water
	<u>Lactose Production Line - Lactose Receiving Baghouse</u> Manufacturer: NIRO Model: 400-12 Baghouse type: 16 oz. Polyester BAIF Number of bags: 75 Product capture efficiency: 99.99%	None, the baghouse is process equipment

**[proposed]**

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**2. BIOGAS FLARE AND AUXILIARY BOILER****2.1 Process Description**

Process water used for processing cheese and whey is treated by screening, clarifying, and settling. An anaerobic digester is used to further treat the water prior to discharging to land application. The digester generates biogas that is burned in a biogas/natural gas-fired hot water boiler (auxiliary boiler or Blr 5). In the event the auxiliary boiler is not capable of burning the biogas, it is incinerated by a flare. The auxiliary boiler is used to heat the influent wastewater. The biogas is either burned in the auxiliary boiler or the flare. If not enough biogas is available to fire the auxiliary boiler, natural gas is used as the fuel for the auxiliary boiler, and all the biogas is burned in the flare. The pilot light for the flare is only operated intermittently when the biogas pressure drops below a certain level.

The flare incinerates biogas exclusively and has a natural gas-fired pilot flame. The auxiliary boiler is fired on biogas and natural gas exclusively. The flare and the auxiliary boiler are not fired on biogas simultaneously.

**2.2 Emissions Control Description**

Emissions from the anaerobic digester are controlled either by an auxiliary boiler or a biogas flare.

**TABLE 2.1 BIOGAS FLARE DESCRIPTION**

<b>Emissions Unit(s) / Process(es)</b>	<b>Emissions Control Device</b>
Anaerobic digester	Blr 5 - Biogas-fired auxiliary hot water boiler Manufacturer: Cleaver Brooks Model No.: CB700-400-30H Rated Heat Input Capacity: 16.73 MMBtu/hr Fuels: Biogas and/or natural gas
	Flr 1 – Biogas-fired flare Manufacturer: Varec Biogas Model: No. 244 W Rated Heat Input Capacity: 11.75 MMBtu/hr

***Emissions Limits*****2.3 Emissions Limits****2.3.1 SO<sub>2</sub> Emission Limit**

The total SO<sub>2</sub> emissions from the auxiliary boiler stack and the biogas flare shall not exceed 30.1 tons per any consecutive 12-month period (T/yr).

**2.3.2 H<sub>2</sub>S Emissions Limits**

- Emissions of H<sub>2</sub>S from the biogas flare shall not exceed 8.66 lb/day.
- Emissions of H<sub>2</sub>S from the biogas flare shall not exceed 1.58 T/yr.
- Emissions of H<sub>2</sub>S from auxiliary boiler stack shall not exceed 1.73 lb/day, while combusting biogas.

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- Emissions of H<sub>2</sub>S from auxiliary boiler stack shall not exceed 0.32 T/yr, while combusting biogas.

**2.4 Opacity Limit**

Emissions from the biogas flare or from the auxiliary boiler stack, or any other stack, vent, or functionally equivalent opening associated with the flare or auxiliary boiler, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

**2.5 Auxiliary Boiler Grain Loading Limit**

The permittee shall not discharge to the atmosphere from the auxiliary boiler stack PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, as required by IDAPA 58.01.01.676.

**2.6 Biogas Flare Particulate Matter Emissions Limit**

Particulate matter emissions from the biogas flare shall not exceed 0.2 pounds per 100 pounds of biogas burned, as required by IDAPA 58.01.01.785.

**2.7 Rules for the Control of Odors**

The permittee shall not allow, suffer, cause or permit the emission of odorous gases, liquids, or solids into the atmosphere in such quantities as to cause air pollution, as required by IDAPA 58.01.01.776.01.

***Operating Requirements***

**2.8 Requirements to Install Flare and to Combust Digester Emissions**

The permittee shall install, calibrate, maintain, and operate a flare for the combustion of the biogas emitted from the anaerobic digester. All emissions of air pollutants from the anaerobic digester shall be combusted in either the auxiliary boiler or the flare.

**2.9 Pilot Flame and Alarm**

The flare shall be operated with a pilot flame present during the operation of the digester. In the event of a flame failure, the permittee shall follow a standard operating procedure to reinitiate the pilot flame as expeditiously as practicable.

Within 60 days of issuance of this permit, the permittee shall install a thermocouple or similar device that detects the presence of a flame in the biogas flare. This device shall be periodically calibrated and shall be operated at all times when the flare is operating. In addition, the permittee shall install an alarm that notifies the operator in the case of a flameout within 60 days of issuance of this permit. The permittee shall follow the excess emissions procedures in IDAPA 58.01.01.130-136 in the event of an excess emissions event caused by the biogas flare.

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**2.10 Concurrent Operation of the Flare and the Auxiliary Boiler**

The flare and the auxiliary boiler shall not operate concurrently while combusting biogas.

***Monitoring, Recordkeeping, and Reporting Requirements***

**2.11 NSPS-Subpart Dc Applicability Notification, Monitoring, Reporting and Recordkeeping Requirements (Auxiliary Boiler)**

In accordance with 40 CFR 60.48c(a), the permittee shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup as required by 40 CFR 60.7 for the auxiliary boiler.

The notification shall include the following:

- the design heat input capacity of the affected facility,
- fuels to be combusted in the affected facility,
- the annual capacity factor at which the permittee anticipates operating the affected facility based on all fuels fired and based on each fuel fired.

The monitoring and recordkeeping of fuels combusted in the auxiliary boiler shall comply with 40 CFR 60.48c(g):

- The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day, unless alternative monitoring, recordkeeping, and reporting is formally approved by EPA.
- The permittee shall maintain written documentation of any EPA-approved monitoring, recordkeeping, and reporting requirements for the auxiliary boiler.

**2.12 Biogas Flow and H<sub>2</sub>S Concentrations Monitoring**

Unless an alternative monitoring and recordkeeping method is approved by DEQ, the permittee shall comply with the following requirements:

For the hydrogen sulfide analyzer and the totalizing gas flow rate analyzer upstream of the auxiliary boiler and the biogas flare, the permittee shall install, calibrate, maintain, operate, and record parameters in accordance with the O&M manual and the requirements listed below:

**Biogas H<sub>2</sub>S Concentration**

The permittee shall perform the following to determine the quantity of H<sub>2</sub>S produced by the anaerobic digester:

- Calibration of the hydrogen sulfide analyzer shall be performed and recorded semi-annually.
- An H<sub>2</sub>S sample shall be taken and analyzed by the hydrogen sulfide analyzer, and the H<sub>2</sub>S concentration results recorded, at least once per week. If additional H<sub>2</sub>S samples are taken, those shall also be recorded.



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Biogas Generation

The permittee shall perform the following to determine the quantity of biogas produced by the anaerobic digester:

- Once per month, the total gas flow shall be recorded.

H<sub>2</sub>S and SO<sub>2</sub> Emission Estimates

The permittee shall estimate H<sub>2</sub>S and SO<sub>2</sub> emissions according to the following methods:

- The monthly SO<sub>2</sub> emissions and H<sub>2</sub>S emissions from the flare and the auxiliary boiler shall be calculated using the average H<sub>2</sub>S concentration readings of all H<sub>2</sub>S samples taken for each month, and the corresponding monthly biogas flow. The calculations shall be conducted using the same method as in the permit application, including a molar conversion of H<sub>2</sub>S to SO<sub>2</sub>, a 90% H<sub>2</sub>S control efficiency and 90% conversion of H<sub>2</sub>S to SO<sub>2</sub> for the flare; and a 98% H<sub>2</sub>S control efficiency, and a 100% conversion of H<sub>2</sub>S to SO<sub>2</sub> emissions for the auxiliary boiler.
- Monthly SO<sub>2</sub> emissions shall be used to determine rolling 12-month total SO<sub>2</sub> emissions.
- Monthly H<sub>2</sub>S emissions shall be used to determine rolling 12-month H<sub>2</sub>S emissions.

**2.13 Operations and Maintenance Manual**

Within 60 days of start-up of the digester, the permittee shall develop an operations and maintenance (O&M) manual which describes the procedures that will be followed to maintain good working order and assure operation as efficiently as practical for the H<sub>2</sub>S monitor and the pilot flame detector. The procedures and specifications described in the O&M manual shall address, at a minimum, the following topics:

H<sub>2</sub>S Monitor

- Standard operational procedure for H<sub>2</sub>S sampling
- Frequency and method of calibration
- Operational maintenance
- Procedures for upset/breakdown conditions and for correcting equipment malfunctions

Pilot Flame Detector

- Method of ensuring continuous operation
- Operational maintenance

Within 60 days of start-up of the digester, a copy of the O&M manual shall be submitted to the DEQ Twin Falls Regional Office at the following address:

Air Quality Permit Compliance  
Department of Environmental Quality  
Twin Falls Regional Office  
1363 Fillmore  
Twin Falls, Idaho 83301  
Phone: (208) 736-2190

Fax: (208) 736-2194

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#### 2.14 Recordkeeping Requirement

A compilation of the most recent five years of records shall be kept onsite and shall be made available to DEQ representatives upon request.

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**3. PROCESS BOILERS****3.1 Process Description**

Four existing boilers provide steam and hot water to the manufacturing processes at the facility. Two boilers combust natural gas exclusively. Two boilers are dual-fuel boilers and are permitted to combust either natural gas or up to 387,258 gallons per year of low sulfur distillate fuel oil individually or collectively.

**3.2 Emissions Control Description**

Emissions from the existing process boilers are uncontrolled.

**TABLE 3.1 PROCESS BOILER DESCRIPTION**

<b>Emissions Unit(s) / Process(es)</b>	<b>Emissions Control Device</b>
<b><u>Boiler 2 (Blr 2)</u></b> Rated Heat Input Capacity: 25.1MMBtu/hr Manufacturer: Cleaver Brooks Model No.: CB600-600 Serial No.: L-90943 Fuels: Low sulfur distillate fuel oil or natural gas Date of Installation: July 1992	Annual distillate fuel oil throughput limit and distillate fuel oil sulfur content limit
<b><u>Boiler 3 (Blr 3)</u></b> Rated Heat Input Capacity: 25.1MMBtu/hr Manufacturer: Cleaver Brooks Model No.: CB600-600 Serial No.: L-79896 Fuels: Low sulfur distillate fuel oil or natural gas Date of Installation: December 1996	Annual distillate fuel oil throughput limit and distillate fuel oil sulfur content limit
<b><u>Boiler 4 (Blr 4)</u></b> Rated Heat Input Capacity: 25.1MMBtu/hr Manufacturer: Cleaver Brooks Model No.: CB600-600 Serial No.: L-79895 Fuels: Natural gas exclusively Date of Installation: December 1999	None

***Emissions Limits*****3.3 Process Boiler Stack Emissions****3.3.1 Particulate Matter Emissions**

Particulate matter emissions from any process boiler stack shall not exceed 0.05 gr/dscr of effluent gas corrected to 3% oxygen by volume when combusting liquid fuel, nor shall PM emissions from any process boiler stack exceed 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume when combusting gas.

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**3.3.2 NSPS—Subpart Dc Sulfur Dioxide Emission Standard**

Sulfur dioxide (SO<sub>2</sub>) emissions from any oil-fired process boiler stack not exceed 0.5 lb/MMBtu heat input, as required in 40 CFR 60.42.c(d), or as an alternative, the sulfur content in any oil combusted in any oil-fired process boiler shall not be greater than 0.5 wt%.

**3.3.3 Annual Sulfur Dioxide Emission Limit**

Aggregated annual emissions of SO<sub>2</sub> from Boilers 2 and 3 shall not exceed 1.4 T/yr while combusting distillate fuel oil.

**3.4 Visible Emissions Limit**

Emissions from each process boiler stack, or any other stack, vent, or functionally equivalent opening associated with each process boiler, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

***Operating Requirements***

**3.5 Allowable Fuel Types**

- Boilers 1 and 4  
Boilers 1 and 4 shall combust natural gas exclusively.
- Boilers 2 and 3  
Boilers 2 and 3 shall combust either natural gas or low sulfur distillate fuel oil.

**3.6 Distillate Fuel Oil Throughput Limit**

The total throughput of low sulfur distillate fuel oil combusted either individually or aggregated in Boilers 2 and 3 shall not exceed 387,258 gallons per any consecutive 12-month period.

**3.7 Distillate Fuel Oil Sulfur Content Limit**

The sulfur content of any distillate fuel oil combusted in Boilers 2 and 3 shall not exceed 0.05 wt%.

**3.8 Rules for the Control of Open Burning**

The permittee shall comply with the provisions of IDAPA 58.01.01.600-617 to protect public health and welfare from air pollutants resulting from open burning.

***Monitoring, Recordkeeping and Reporting Requirements***

**3.9 Distillate Fuel Oil Combustion Monitoring**

The permittee shall monitor and record the throughput of distillate fuel oil combusted in Boilers 2 and 3 monthly and annually, expressed as gallons per month (gal/mo) and gallons per year (gal/yr), to

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demonstrate compliance with Permit Condition 3.6. Annual throughput shall be determined by summing each monthly throughput over the previous consecutive 12-month period.

**3.10 NSPS-Subpart Dc Distillate Fuel Oil Sulfur Content Monitoring, Recordkeeping and Reporting Requirements (Boilers 2 and 3)**

The permittee shall comply with the following requirements for Boilers 2 and 3, in accordance with 40 CFR 60.42c(h):

- The permittee shall demonstrate compliance with the fuel oil sulfur content limits specified in Permit Condition 3.7 and 40 CFR 60.42c(d) by complying with 40 CFR 60.48c(d), CFR 60.48c(e), and 40 CFR 60.48c(f).
- Records of each fuel oil sulfur content certification shall remain onsite for the most recent two-year period in accordance with 40 CFR 60.48c(i), and shall be made available to DEQ representatives upon request.
- Semi-annual reports shall be submitted to EPA Region 10 in accordance with 40 CFR 60.48c(j).

**3.11 NSPS-Subpart Dc Applicability Notification, Monitoring, Reporting and Recordkeeping Requirements (Boilers 1-Cleaver Brooks boiler, 2, 3, and 4)**

In accordance with 40 CFR 60.48c(a), the permittee shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup as required by 40 CFR 60.7 for Boilers 1 (Cleaver Brooks boiler), 2, 3, and 4.

The notification shall include the following:

- the design heat input capacity of the affected facility,
- fuels to be combusted in the affected facility,
- the annual capacity factor at which the permittee anticipates operating the affected facility based on all fuels fired and based on each fuel fired.

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**4. LACTOSE PRODUCTION LINE****4.1 Process Description**

The Glanbia Gooding facility produces whey powder from the lactose production line. The lactose process line sends lactose through an evaporator, concentrator, crystallizer, centrifuge and then a dryer. The exhaust gas from the dryer is sent through a cyclone where product is recovered and recirculated back to the product stream. The product that is not recovered in the cyclone passes through a wet scrubber. From the dryer, lactose is transferred to a sifter, mill, classifier and a baghouse where the finished product is received. The finished product is sent on for packaging. Traces of particulate matter are released to the atmosphere separately through the exhaust stacks of the scrubber and receiving baghouse. The solids feed rate entering the lactose dryer is 7,621 pounds per hour.

**[proposed]****4.2 Emissions Control Description**

The emissions from the dryer are controlled by a scrubber.

**TABLE 4.1 LACTOSE DRYER AND LACTOSE RECEIVING BAGHOUSE**

<b>Emissions Unit(s) / Process(es)</b>	<b>Emissions Control Device</b>
Lactose dryer	Scrubber (following the cyclone in series to control whey powders) Manufacturer: NIRO/YORK Model: NIRO 4.18 Control Efficiency: 52% Water Flow: 3.74 gallon per minute Pressure Drop: 1.0 inch of water
Lactose Receiving Baghouse Manufacturer: NIRO Model: 400-12 Baghouse type: 16 oz. Polyester BAIF Number of bags: 75 Product capture efficiency: 99.99%	None, the baghouse is process equipment

**[proposed]*****Emissions Limits*****4.3 Emissions Limit**

The PM<sub>10</sub> emissions from the stack of lactose dryer scrubber shall not exceed 121 pounds per calendar day.

**[proposed]****4.4 Opacity Limit**

Emissions from the stack of the lactose dryer scrubber and the stack of the lactose receiving baghouse, or any other stack, vent, or functionally equivalent opening associated with the lactose dryer scrubber, and lactose receiving baghouse, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

**[proposed]**

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### ***Operating Requirements***

#### **4.5 Scrubber Operation Requirement**

4.5.1 The permittee shall install and operate a scrubber to control emissions from the lactose dryer.

4.5.2 The scrubber operating parameter shall be maintained as follows:

- The scrubbing media flowrate shall be equal to or greater than 3.74 gallons per minute.
- As an alternative to the minimum operating value specified in this permit condition, the permittee may establish a new minimum operating value of the scrubbing media flowrate by conducting performance test(s) that demonstrates compliance with PM<sub>10</sub> emissions limit specified in Permit Condition 4.3 while operating at the alternative minimum operating value. The performance test shall be conducted in accordance with Permit Condition 4.7. Upon receiving DEQ written approval, the permittee shall operate in accordance with DEQ approved minimum operating value. A copy of DEQ's approval shall be maintained on site with a copy of this permit.

4.5.3 The permittee shall operate a device to continuously measure the scrubbing media flow rate to the wet scrubber in gallons per minute.

**[proposed]**

#### **4.6 Baghouse Operation Requirement**

The permittee shall inspect the baghouse weekly to ensure its proper operation. The permittee shall replace all the bags in the baghouse every six months, or a different frequency proposed by the permittee and approved by DEQ.

**[proposed]**

### ***Monitoring, Recordkeeping and Reporting Requirements***

#### **4.7 Performance Test**

4.7.1 Within six months of the completion of the lactose project upgrade, the permittee shall conduct a performance test, in accordance with General Provision 6 of this permit, to demonstrate compliance with the emissions limit of the lactose dryer scrubber specified in Permit Condition 4.3.

4.7.2 The permittee shall monitor and record the following operating parameters:

- The scrubbing media flow rate to the wet scrubber in gallons per minute, a minimum of four times during each test run.
- Lactose dryer production rate during each test run, expressed in pounds per hour.

4.7.3 The permittee may operate scrubber below the minimum value specified in Permit Condition 4.5.2 only during the performance test for the purpose of establishing new minimum value.

**[proposed]**

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**4.8     Scrubber Parameter Monitoring**

The permittee shall monitor and record the scrubbing media flow rate in gallons per minute once per week, for any week that the lactose dryer is operated.

**[proposed]**

**4.9     Scrubber Maintenance**

The permittee shall inspect the scrubbing media delivery nozzles every six months. The inspection shall assure that the nozzles are not plugged, eroded or otherwise not functioning as designed. The permittee shall maintain records of the inspections and any maintenance conducted.

**[proposed]**

**4.10    Visible Emissions Monitoring**

To demonstrate compliance with Permit Condition 4.4, the permittee shall conduct a quarterly inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions. The inspection shall consist of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20%, as measured using Method 9, for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in its annual compliance certification and in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each visible emission inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

**[proposed]**

**4.11    Recordkeeping**

The permittee shall maintain records of the results of all monitoring specified in Permit Conditions 4.5 through 4.10 in accordance with General Provision 7 of this permit.

**[proposed]**



**AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2007.0052**

<b>Permittee:</b>	Glanbia Foods, Inc.	<b>Facility ID No. 047-00008</b>
<b>Location:</b>	Gooding, Idaho	

## 5. SUMMARY OF EMISSIONS LIMITS

Table 5.1 provides a summary of all emissions limits required by this permit:

**TABLE 5.1 SUMMARY OF EMISSIONS LIMITS**

<b>Glanbia Foods, Inc., Gooding Emissions Limits<sup>a</sup> - Annual<sup>b</sup> (T/yr)</b>				
<b>Source Description</b>	<b>H<sub>2</sub>S</b>		<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>
	<b>lb/day</b>	<b>T/yr</b>	<b>T/yr</b>	<b>lb/day<sup>d</sup></b>
Biogas Flare	8.66	1.58	30.1	NA
Auxiliary Boiler 5	1.73	0.32		
Boiler 2	NA <sup>c</sup>	NA	1.4	NA
Boiler 3	NA	NA		
Lactose dryer scrubber	NA	NA	NA	121

<sup>a</sup> As determined by a pollutant-specific EPA reference method, DEQ-approved alternative, or as determined by DEQ's emissions estimation methods used in this permit analysis.

<sup>b</sup> As determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emissions rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates. The permittee shall not exceed the T/yr listed based on any consecutive 12-month period.

<sup>c</sup> Not applicable to this emissions unit

<sup>d</sup> lb/day based on calendar day average.

**[proposed]**

**AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2007.0052**

**Permittee:** Glanbia Foods, Inc.

**Location:** Gooding, Idaho

**Facility ID No.** 047-00008

## **6. PERMIT TO CONSTRUCT GENERAL PROVISIONS**

### ***General Compliance***

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.  

**[Idaho Code §39-101, et seq.]**
2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.  

**[IDAPA 58.01.01.211, 5/1/94]**
3. Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules and regulations.  

**[IDAPA 58.01.01.212.01, 5/1/94]**

### ***Inspection and Entry***

4. Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
  - a. Enter upon the permittee's premises where an emissions source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d. As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

**[Idaho Code §39-108]**

### ***Construction and Operation Notification***

5. The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:
  - a. A notification of the date of initiation of construction, within five working days after occurrence;
  - b. A notification of the date of any suspension of construction, if such suspension lasts for one year or more;

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- c. A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date;
- d. A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
- e. A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

**[IDAPA 58.01.01.211, 5/1/94]**

***Performance Testing***

6. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

**[IDAPA 58.01.01.157, 4/5/00]**

***Monitoring and Recordkeeping***

7. The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Records of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

**[IDAPA 58.01.01.211, 5/1/94]**

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***Excess Emissions***

8. The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

**[IDAPA 58.01.01.130-136, 4/5/00]**

***Certification***

9. All documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

**[IDAPA 58.01.01.123, 5/1/94]**

***False Statements***

10. No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.

**[IDAPA 58.01.01.125, 3/23/98]**

***Tampering***

11. No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

**[IDAPA 58.01.01.126, 3/23/98]**

***Transferability***

12. This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

**[IDAPA 58.01.01.209.06, 4/11/06]**

***Severability***

13. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.